

What is claimed is:

1. A random drawing auction system based on an entrance fee profit model, comprising:

5 a database unit storing auction condition information comprising an open market selling price, auction quantity, auction duration, an initial entrance fee and an entrance fee type of an item auctioned through Internet, bid history information of a buyer wishing to purchase the item through the Internet, and bid details information of the item;

10 an item registration unit allowing a seller to register auction condition information of an item or directly register the auction condition information and posting the item and the auction condition information to a web site when an auction start time of the registered item is encountered;

15 a bid qualification determiner determining whether a buyer is qualified for bidding for an item based on the buyer's bid history information in response to the buyer's request for permission to bid for the item;

20 a bid execution unit requesting the buyer to pay an initial entrance fee of an item when a buyer is determined as being qualified for bidding for the item, collecting an initial entrance fee of the item from the buyer, requesting the buyer to set a tender price for the item, and inputting the tender price;

25 a bid terminator determining whether to terminate a bid for an item based on at least one among auction duration of the item, for which the bid is being executed by the bid execution unit, and an accumulated entrance fee resulting from the bid of each of buyers for the item;

30 a successful bidder selector calculating a reference contract price using a minimum contract price and a maximum contract price of an item and a random number induced by a random probability function after a bid for the item is terminated, comparing the reference contract price with a tender price set by each of buyers, and selecting as a successful

PCT/KR2004/002626**RO/KR 04.04.05**

bidder a buyer that has set a tender price closest to the reference contract price or close in a predetermined sequence to the reference contract price; and

5 a delivery/payment processor collecting a tender price set by a buyer selected as a successful bidder, performing a process to deliver an item to the successful bidder, and giving a sales payment to a seller of the item.

10 2. The random drawing auction system of claim 1, wherein the item registration unit calculates a maximum payable bid price, which can be paid as a sale payment for the item, using an open market selling price and auction quantity of the item.

15 3. The random drawing auction system of claim 2, wherein the auction condition information further comprises a contract price setup range for the item, the buyer's bid history information comprises at least one among a total bid count and a total bid amount of a buyer obtained for an item or during a predetermined period of time, and the bid details information of the item comprises information on a bidder bidding for the item and an accumulated entrance fee resulting from bidders' bidding for the item.

25 4. The random drawing auction system of claim 3, wherein the bid qualification determiner determines that the buyer is unqualified for bidding for the item when a total bid count or a total bid amount of the buyer obtained for the item or during a predetermined period of time exceeds a predetermined maximum available bid count or a predetermined maximum available bid amount, respectively.

30 5. The random drawing auction system of claim 3, wherein if an entrance fee type of an item is a fixed type where an initial entrance

fee is set as a final entrance fee, the bid terminator terminates a bid for the item when an accumulated entrance fee of the item reaches a maximum payable bid price set for the item or when an auction end time of the item is encountered even though the accumulated entrance fee of the item does not reach the maximum payable bid price.

6. The random drawing auction system of claim 3, wherein if an entrance fee type of an item is a variable type where an initial entrance fee varies with an accumulated entrance fee of the item and a total number of bidders for the item which are obtained after the bid for the item is terminated, the bid terminator terminates the bid for the item when an auction end time of the item based on the auction duration of the item is encountered.

7. The random drawing auction system of claim 6, further comprising an entrance fee refund processor when the entrance fee type of the item is the variable type, the entrance fee refund processor comparing an accumulated entrance fee of the item with a maximum payable bid price of the item after the bid for the item is terminated, refunding each of bidders having bidden for the item an amount of money obtained by dividing a surplus of the accumulated entrance fee by a total number of the bidders when the accumulated entrance fee exceeds the maximum payable bid price, but otherwise not refunding.

8. The random drawing auction system of claim 5 or 7, wherein the a delivery/payment processor gives a seller of the item an amount of money not exceeding the maximum payable bid price in the accumulated entrance fee of the item and a tender price collected from a successful bidder for the item as a sales payment for the item.

9. The random drawing auction system of claim 1, wherein the successful bidder selector calculates an absolute value of a difference between a reference contract price of an item and each of tender prices, selects as a successful bidder a bidder having set a tender price giving a minimum absolute value, or the successful bidder selector selects as the
5 successful bidder a bidder having set a tender price closest to the reference contract price or close in a predetermined sequence to the reference contract price among tender prices that are at least or do not exceed the reference contract price.

10. A random drawing auction method based on an entrance fee profit model, comprising the operations of:

(a) receiving auction condition information comprising an open market selling price, auction quantity, auction duration, an initial entrance
15 fee and an entrance fee type of an item from a seller wishing to sell the item through Internet, registering the auction condition information in a database, and posting the item and the auction condition information when an auction start time of the item is encountered;

(b) determining whether a buyer accessing through the Internet is
20 qualified for bidding based on bid history information of the buyer in response to the buyer's request for permission to bid for the item, collecting an entrance fee of the item from the buyer when it is determined that the buyer is qualified, and requesting the buyer to set and input a tender price of the item;

25 (c) determining whether to terminate the bid for the item based on at least one among the auction duration of the item and an accumulated entrance fee resulting from the bid of each of buyers for the item;

(d) calculating a reference contract price using a minimum contract price and a maximum contract price of the item and a random number
30 induced by a random probability function after the bid for the item is terminated, comparing the reference contract price with a tender price set

by each of the buyers, and selecting as a successful bidder a buyer that has set a tender price closest to the reference contract price or close in a predetermined sequence to the reference contract price; and

5 (e) collecting the tender price set by the buyer selected as the successful bidder, performing a process to deliver the item to the successful bidder, and giving a sales payment to the seller of the item.

11. The random drawing auction method of claim 10, wherein operation (a) comprises calculating a maximum payable bid price, which
10 can be paid as the sale payment for the item, using the open market selling price and the auction quantity of the item.

12. The random drawing auction method of claim 11, wherein operation (c) comprises, if an entrance fee type of the item is a fixed type,
15 terminating the bid for the item when the accumulated entrance fee of the item reaches the maximum payable bid price or when an auction end time of the item is encountered even though the accumulated entrance fee of the item does not reach the maximum payable bid price.

20 13. The random drawing auction method of claim 11, wherein operation (c) comprises, if an entrance fee type of the item is a variable type, terminating the bid for the item when an auction end time of the item based on the auction duration of the item is encountered.

25 14. The random drawing auction method of claim 13, further comprising, between operations (c) and (d), recognizing that the entrance fee type of the item is the variable type when the bid for the item is terminated, comparing the accumulated entrance fee with the maximum payable bid price, determining whether to refund according to the result
30 of the comparison, and refunding some of the initial entrance fee of the item to each of the buyers having bidden for the item.

15. The random drawing auction method of claim 11 or 14,
wherein operation (e) comprises giving the seller of the item an amount
of money not exceeding the maximum payable bid price in the
5 accumulated entrance fee of the item and the tender price collected from
the successful bidder for the item as the sales payment for the item.